IN THE CLAIMS

Please rewrite the claims as follows:

Claims 1 - 7 (Cancelled).

8. (Currently Amended) A film thickness measuring apparatus using a fast Fourier transformation comprising:

a light source for projecting a light on the surface of a thin film sample;

a spectrograph for splitting the light reflected from the sample according to ~~the intensity of~~ each wavelength;

an optical measuring device array for measuring intensities of each wavelength of the split reflected light;

a conversion unit for converting a signal of the measured intensities of each wavelength of the split reflected light into a digital signal data; and

a computation unit for computing a thickness of the thin film based on the number of oscillation obtained by a fast Fourier transformation in which the digital signal converted by the conversion unit adapts a refraction index dispersion ~~(variation of the refraction index according to each wavelength of the reflected light)~~.

9. (Previously Amended) The apparatus according to Claim 8, wherein the computation unit is directed to compute the thickness of the thin film based on the

following Equation:

$$d = \frac{619.9}{\Delta (n_f E)} = 619.9 \times f_{nE}$$

where n_f represents a refraction index of the thin film, d represents the thickness of the thin film, $\Delta (n_f E)$ represents a period of reflection spectrum in the axis of photon energy multiplied by dispersive refraction index, and f_{nE} represents the number of oscillations of a reflection spectrum in the axis of photon energy multiplied by dispersive refraction index.

10. (Currently Amended) A method for measurement of film thickness using a fast Fourier transformation comprising the steps of:

projecting a light on the surface of a thin film sample;

splitting the light reflected from the sample according to ~~the intensity of~~ each wavelength;

measuring intensities of each wavelength of the split reflected light;

converting a signal of the measured intensities of each wavelength of the split reflected light into a digital signal data; and

computing a thickness of the thin film based on the number of oscillation of reflection spectrum obtained by a fast Fourier transformation in which the digital signal data transformed by the transformation unit adapts a refraction index dispersion ~~(variation of the refraction index according to each wavelength of the reflection light)~~.

11. (Previously Amended) The method according to Claim 10, wherein in the step of computing the thickness of the thin film, the film thickness is computed based on the following equations:

$$d = \frac{619.9}{\Delta (n_f E)} = 619.9 \times f_{nE}$$

where n_f represents a refraction index of the thin film, d represents the thickness of the thin film, $\Delta (n_f E)$ represents a period of reflection spectrum in the axis of photon energy multiplied by dispersive refraction index, and f_{nE} represents the number of oscillations of a reflection spectrum in the axis of photon energy multiplied by dispersive refraction index.